DEPARTMENT OF GEOLOGY

ANNUAL REPORT 1992/93

By Dr.S. Kumarapeli Acting Chair

The most noteworthy event in the affairs of the Department in 1992/93 was the augmentation of the full-time roster of faculty members by two tenure track e entrants. There was also a challenging problem posed to the Department by the deliberations of CREPUQ on the optimization of geology and geological engineering programs in the Island of Montreal and in the rest of Quebec. CREPUQ's work is continuing and its report may be out as early as this winter.

I Students

1.1 Incoming students

The nationally low number of students entering into geology programmes continued into 1992/93. A total of 16 students (6 female and 10 male) students registered in our programmes during the year compared with 32 (9 female, 23 male) students in 1991/92. There are some signs that this cycle of low student enrollments may be changing for the better.

1.2 Continuing and Graduating Students

There were 57 students (14 female, 43 male) registered in our degree programmes compared with 67 (21 female, 46 male) in the previous year. The enrollments in the various programmes were as follows:

Specialization Geology (16-4 female, 12 male); Specialization Geology-Physics (3 male); Specialization Geology Chemistry (3-1 female, 2 male; Specialization Geology-Ecology (11-5 female, 6 male); Specialization Resource Analysis and Land Use (2 male); Major (21-6 female, 15 male) and inter-faculty special student (1 female).

Good news of high enrollment in our general interest courses continue. A total of 569 students registered in these courses compared with 581 in the previous year. Academic standing of students was on the whole satisfactory. One student failed to maintain the required GPA. Seven students (2 female, 5 male) graduated during the last academic year.

1.3 Student Awards

Award recipients for the 1992/93 academic year were as follows:

- 1. Mr. Michael Thomas: Andre Deland Medal for best graduating student in Geology.
- 2. Mr. Richard Leveille: Geology Department Special Award for best second year student.
- 3. Mr. Stephen Warner: Canadian Society of Petroleum Geologists Slipper Award for best performance in sedimentary related fields.
- 4. Mr. Robert Johnson: Geological Association of Canada Award for strong performance in the second year Geology programme.
- 5. Ms. Katherine Ault: Canadian Society of Petroleum Geologists Student-Industry Field Trip Award for strong performance in petroleum geology related courses in a second year geology programme.

2 Support Staff

The Department is much relieved and pleased to have Ms. L. Bertrand back in the department following her recuperation from an accidental fall related injuries. Excellent substitute secretarial assistance was provided by Ms. W. Salamoun from the Dean's staff pool.

3 Faculty

3.1 General News

Drs. Judith Patterson and Colleen Elliott joined the Department to boost the number of full-time faculty to six. There were no promotions or retirements.

- Dr. K.K. Mukherji was on sabbatical leave from January 1993 to June 30, 1993 and spent most of that time carrying out research at the Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur, in India. Also he travelled in Thailand and Singapore.
- Dr. S. Kumarapeli was the Acting Chair of the Department during Dr. Mukherji's leave of absence.

3.2 Research

Departmental faculty members (2 full-time and 2 adjunct) brought approximately \$43,394 (including \$10,771 transfer by Dr. J. Patterson) in NSERC research funding. Internal research funding showed a significant rise to \$34,896 from

\$5320 in the previous year. This increase reflects the FRDP and GRF grants received by the new faculty members.

3.3 Publications

Six faculty members (4 full-time and 2 adjunct) are credited with the following scholarly contributions:

Refereed Journal Papers (published) 10
Refereed Journal Papers (submitted) 12
Conference Proceedings (published) 1
Abstract of Papers (presented) 16

4 Curriculum

A course in hydrogeology that has been offered successfully in the previous years as a selected topic course was formalized as GEOL. 233 (Introduction to Hydrogeology) in the calendar description. Apart from a few minor changes no major curriculum changes were introduced in view of the departmental self-appraisal in 1993-94.

5 CREPUQ

The CREPUQ committee is in the process of reviewing the activities of Geology and Geological engineering departments in Montreal Island and the rest of Quebec. It is expected to recommend optimization or integration of their activities in view of the low student enrollments prevalent in these departments at this time. At the request of CREPUQ, the department supplied detailed information on courses offered. professors and students. The Chair of the Department participated in several meetings of the CDDUGO (Conf. des directeure de départments universitaires de géologie du Québec) to respond to the requests of the CREPUQ committee. At the request of the CDDUGQ, the CREPUQ committee accepted two representative of the CDDUGQ to participate in CREPUQ's planning committee. The department has been in constant touch with and supplying information to Dr. Paul Fazio who is Concordia's representative in the CREPUQ committee. Two points that the department has made are: i) the present phase of low enrollments, like the ones that have come and gone in the past, is probably temporary and appears to be related to the current recession, ii) no university, let alone a university of the size of Concordia, should be left without an Earth Science Programme.

6 Capital Equipment

Department acquired the following items:

Reflecting microscope \$10000 (appx)
 Student and Faculty computers \$4180 (appx)
 Fax machine \$2500 (appx)

4. Quartz wedges \$2000 (appx)

5. Fibre optics illuminator \$725

6. Laser Printer \$2900 (appx)

7 Invited Seminars

Eight seminars were given by invited speakers, faculty members and a student. Names of speakers are given below:

Mr. D. Strickland (Concordia Student):

Dr. R. Darling (Ecole Polytechnique):

Dr. S. Wissenbergor (ESSO Research, Calgary):

Prof. H. Hofmann (University of Montreal):

Prof. J. Béland (Part-Time Faculty):

Prof. H. Morency (UQAM):

Dr. C. Elliott (Concordia);

Dr. J. Patterson (Concordia):

8 Exhibition and Promotional Activities

Department participated in the Annual Concordia Science Exhibition held at the Stewart Hall, in Pointe Claire. At the Science Exploration Week Drs. Judith Patterson and Colleen Elliott organized two hands on, animated learning exercises on Environmental Geology and Mountain Building respectively. Prof. Jenkins visited Vanier College for student recruitment in late fall.

9 Student Activity

A four day mineral collecting tour to Bancroft was organized by the Geology Club in consultation with Dr. Mukherji. Dr. Mukherji joined the students in the field trip. The Geology Club organized four social get-togethers. The Department partially subsidized the cost of all club related activities.

10 Meetings

Department held 5 general and 3 special meetings to clear various business of the past academic year.

11 External Technical Services

Drs. Mukherji and Kumarapeli provided technical assistance to the Inspec-Sol Inc. and the Canamex Granite Inc. on evaluation of building materials. Proceeds of professional fee were donated to the Geology Club to encourage student activities.

12 Faculty Workload

Six full-time members and five part-time instructors offered 18 (60 credits) and 5 (15 credits) courses respectively.